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RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/037,460DATE: 11/25/98  
TIME: 13:35:09

INPUT SET: S30053.raw

This Raw Listing contains the General  
Information Section and up to the first 5 pages.

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SEQUENCE LISTING

(1) General Information:

(i) APPLICANT: HASTINGS, ET AL.

(ii) TITLE OF INVENTION: Human Vascular IBP-Like Growth Factor

(iii) NUMBER OF SEQUENCES: 17

(iv) CORRESPONDENCE ADDRESS:

(A) ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN, CECCHI, STEWART & OLSTEIN

(B) STREET: 6 BECKER FARM ROAD

(C) CITY: ROSELAND

(D) STATE: NEW JERSEY

(E) COUNTRY: USA

(F) ZIP: 07068

(v) COMPUTER READABLE FORM:

(A) MEDIUM TYPE: 3.5 INCH DISKETTE

(B) COMPUTER: IBM PS/2

(C) OPERATING SYSTEM: MS-DOS

(D) SOFTWARE: WORD PERFECT 5.1

(vi) CURRENT APPLICATION DATA:

(A) APPLICATION NUMBER: 09/037,460

(B) FILING DATE:

(C) CLASSIFICATION:

(vii) PRIOR APPLICATION DATA:

(A) APPLICATION NUMBER: 08/464,339

(B) FILING DATE: June 5, 1995

(A) APPLICATION NUMBER: PCT/US94/14388

(B) FILING DATE: 9 DEC 1994

(viii) ATTORNEY/AGENT INFORMATION:

(A) NAME: MULLINS, J.G.

(B) REGISTRATION NUMBER: 33,073

(C) REFERENCE/DOCKET NUMBER: 325800-332

(ix) TELECOMMUNICATION INFORMATION:

(A) TELEPHONE: 201-994-1700

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47 (B) TELEFAX: 201-994-1744

48

49 (2) INFORMATION FOR SEQ ID NO:1:

50

51 (i) SEQUENCE CHARACTERISTICS:

52 (A) LENGTH: 1271 BASE PAIRS

53 (B) TYPE: NUCLEIC ACID

54 (C) STRANDEDNESS: SINGLE

55 (D) TOPOLOGY: LINEAR

56

57 (ii) MOLECULE TYPE: cDNA

58

59 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

60

61	CTGCTTCCCA	CCAGCAAAGA	CCACGACTGG	AGAGCCGAGC	CGGAGCAGCT	GGGAAACATG	60
62	AAGAGCGTCT	TGCTGCTGAC	CACGCTCCTC	GTGCCTGCAC	ACCTGGTGGC	CGCCTGGAGC	120
63	AATAATTATG	CGGTGGACTG	CCCTCAACAC	TGTGACAGCA	GTGAGTGCAA	AAGCAGCCCG	180
64	CGCTGCAAGA	GGACAGTGCT	CGACGACTGT	GGCTGCTGCC	GAGTGTGCGC	TGCAGGGCGG	240
65	GGAGAACTT	GCTACCGCAC	AGTCTCAGGC	ATGGATGGCA	TGAAGTGTGG	CCCGGGGCTG	300
66	AGGTGTCAGC	CTTCTAATGG	GGAGGATCCT	TTTGGTGAAG	AGTTTGGTAT	CTGCAAAGAC	360
67	TGTCCCTACG	GCACCTTCGG	GATGGATTGC	AGAGAGACCT	GCAACTGCCA	GTCAGGCATC	420
68	TGTGACAGGG	GGACGGGAAA	ATGCCTGAAA	TTCCCTTCT	TCCAATATTC	AGTAACCAAG	480
69	TCTTCCAACA	GATTTGTTTC	TCTCACGGAG	CATGACATGG	CATCTGGAGA	TGGCAATATT	540
70	GTGAGAGAAG	AAGTTGTGAA	AGAGAATGCT	GCCGGGTCTC	CCGTAATGAG	GAAATGGTTA	600
71	AATCCACGCT	GATCCCGGCT	GTGATTTCTG	AGAGAAGGCT	CTATTTTCGT	GAYTGTTCOA	660
72	CACACAGCCA	ACATTTTAGG	AACTTTCTAG	ATTATAGCAT	AAGGACATGT	AATTTTGTGA	720
73	GACCAATGT	GATGCATGGT	GGATCCAGAA	AACAAAAAGT	AGGATACTTA	CAATCCATAA	780
74	CATCCATATG	ACTGAACACT	TGTATGTGTT	TGTTAAATAT	TCGAATGCAT	GTAGATTTGT	840
75	TAAATGTGTG	TGTATAGTAA	CACTGAAGAA	CTAAAAATGC	AATTTAGGTA	ATCTTACATG	900
76	GAGACAGGTC	AACCAAAGAG	GGAGCTAGGC	AAAGCTGAAG	ACCGCAGTGA	GTCAAATTAG	960
77	TTCTTTGACT	TTGATGTACA	TTAATGTTGG	GATATGGAAT	GAAGACTTAA	GAGCAGGAGA	1020
78	AGATGGGGAG	GGGGTGGGAG	TGGGAAATAA	AATATTTAGC	CC'TTCCTTGG	TAGGTAGCTT	1080
79	CTCTAGAATT	TAATTRTGCT	TTTTTTTTTTT	TTTTTTGGGCT	TTGGGAAAAG	TCAAAAATAAA	1140
80	ACAACCAGAA	AACCCCTGAA	GGAAGTAAGA	TGTTTGAAGC	TTATGGAAAT	TTGAGTAACA	1200
81	AACAGCTTTG	ANCTGAGAGC	AATTYCAAAA	GGCTGCTGAT	GTAGCCCCCG	GGTTNCCTNT	1260
82	NTCTNAAGGA	C					1271

83

84

85 (2) INFORMATION FOR SEQ ID NO:2:

86 (i) SEQUENCE CHARACTERISTICS:

87 (A) LENGTH: 184 AMINO ACIDS

88 (B) TYPE: AMINO ACID

89 (C) STRANDEDNESS:

90 (D) TOPOLOGY: LINEAR

91

92 (ii) MOLECULE TYPE: PROTEIN

93

94 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

95

96	Met	Lys	Ser	Val	Leu	Leu	Leu	Thr	Thr	Leu	Leu	Val	Pro	Ala	His
97	-20							-15				-10			
98	Leu	Val	Ala	Ala	Trp	Ser	Asn	Asn	Tyr	Ala	Val	Asp	Cys	Pro	Gln
99	-5						1					5			

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100  His Cys Asp Ser Ser Glu Cys Lys Ser Ser Pro Arg Cys Lys Arg
101      10                      15                      20
102  Thr Val Leu Asp Asp Cys Gly Cys Cys Arg Val Cys Ala Ala Gly
103      25                      30                      35
104  Arg Gly Glu Thr Cys Tyr Arg Thr Val Ser Gly Met Asp Gly Met
105      40                      45                      50
106  Lys Cys Gly Pro Gly Leu Arg Cys Gln Pro Ser Asn Gly Glu Asp
107      55                      60                      65
108  Pro Phe Gly Glu Glu Phe Gly Ile Cys Lys Asp Cys Pro Tyr Gly
109      70                      75                      80
110  Thr Phe Gly Met Asp Cys Arg Glu Thr Cys Asn Cys Gln Ser Gly
111      85                      90                      95
112  Ile Cys Asp Arg Gly Thr Gly Lys Cys Leu Lys Phe Pro Phe Phe
113     100                      105                      110
114  Gln Tyr Ser Val Thr Lys Ser Ser Asn Arg Phe Val Ser Leu Thr
115     115                      120                      125
116  Glu His Asp Met Ala Ser Gly Asp Gly Asn Ile Val Arg Glu Glu
117     130                      135                      140
118  Val Val Lys Glu Asn Ala Ala Gly Ser Pro Val Met Arg Lys Trp
119     145                      150                      155
120  Leu Asn Pro Arg
121  160
122

```

(2) INFORMATION FOR SEQ ID NO:3:

(i) SEQUENCE CHARACTERISTICS:

```

126      (A) LENGTH:  31 BASE PAIRS
127      (B) TYPE:    NUCLEIC ACID
128      (C) STRANDEDNESS:  SINGLE
129      (D) TOPOLOGY:  LINEAR

```

(ii) MOLECULE TYPE: Oligonucleotide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

```

134  CGCAAGCTTA AATAATTATG CGGTGGACTG C                                31
135

```

(2) INFORMATION FOR SEQ ID NO:4:

(i) SEQUENCE CHARACTERISTICS:

```

139      (A) LENGTH:  27 BASE PAIRS
140      (B) TYPE:    NUCLEIC ACID
141      (C) STRANDEDNESS:  SINGLE
142      (D) TOPOLOGY:  LINEAR

```

(ii) MOLECULE TYPE: Oligonucleotide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

```

147  CGCTCTAGAT CAGCGTGGAT TTAACCA                                27
148

```

(2) INFORMATION FOR SEQ ID NO:5:

(i) SEQUENCE CHARACTERISTICS:

```

152      (A) LENGTH:  38 BASE PAIRS

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153 (B) TYPE: NUCLEIC ACID  
154 (C) STRANDEDNESS: SINGLE  
155 (D) TOPOLOGY: LINEAR  
156 (ii) MOLECULE TYPE: Oligonucleotide  
157  
158 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:  
159  
160 CGCAGATCTC CGCCACCATG AAGAGCGTCT TGCTGCTG 38  
161  
162 (2) INFORMATION FOR SEQ ID NO:6:  
163  
164 (i) SEQUENCE CHARACTERISTICS:  
165 (A) LENGTH: 30 BASE PAIRS  
166 (B) TYPE: NUCLEIC ACID  
167 (C) STRANDEDNESS: SINGLE  
168 (D) TOPOLOGY: LINEAR  
169 (ii) MOLECULE TYPE: Oligonucleotide  
170  
171 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:  
172  
173 CGCAGATCTA GCCTTCTCTC AGAAATCACA 30  
174  
175 (2) INFORMATION FOR SEQ ID NO:7:  
176  
177 (i) SEQUENCE CHARACTERISTICS:  
178 (A) LENGTH: 19 BASE PAIRS  
179 (B) TYPE: NUCLEIC ACID  
180 (C) STRANDEDNESS: SINGLE  
181 (D) TOPOLOGY: LINEAR  
182 (ii) MOLECULE TYPE: Oligonucleotide  
183  
184 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:  
185  
186 GGGTTTTCCC AGTCACGAC 19  
187  
188 (2) INFORMATION FOR SEQ ID NO:8:  
189  
190 (i) SEQUENCE CHARACTERISTICS:  
191 (A) LENGTH: 18 BASE PAIRS  
192 (B) TYPE: NUCLEIC ACID  
193 (C) STRANDEDNESS: SINGLE  
194 (D) TOPOLOGY: LINEAR  
195 (ii) MOLECULE TYPE: Oligonucleotide  
196  
197 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:  
198  
199 ATGCTTCCGG CTCGTATG 18  
200  
201 (2) INFORMATION FOR SEQ ID NO:9:  
202  
203 (i) SEQUENCE CHARACTERISTICS:  
204 (A) LENGTH: 19 BASE PAIRS  
205 (B) TYPE: NUCLEIC ACID

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206          (C) STRANDEDNESS:  SINGLE
207          (D) TOPOLOGY:  LINEAR
208      (ii) MOLECULE TYPE:  Oligonucleotide
209
210      (xi) SEQUENCE DESCRIPTION:  SEQ ID NO:9:
211
212      GGGTTTTCCC AGTCACGAC
213
214      (2) INFORMATION FOR SEQ ID NO:10:
215
216          (i) SEQUENCE CHARACTERISTICS:
217              (A) LENGTH:  18 BASE PAIRS
218              (B) TYPE:  NUCLEIC ACID
219              (C) STRANDEDNESS:  SINGLE
220              (D) TOPOLOGY:  LINEAR
221
222          (ii) MOLECULE TYPE:  Oligonucleotide
223
224          (xi) SEQUENCE DESCRIPTION:  SEQ ID NO:10:
225
226      ATGCTTCCGG CTCGTATG
227
228      (2) INFORMATION FOR SEQ ID NO:11:
229          (i) SEQUENCE CHARACTERISTICS:
230              (A) LENGTH:  90 AMINO ACIDS
231              (B) TYPE:  AMINO ACID
232              (C) STRANDEDNESS:
233              (D) TOPOLOGY:  LINEAR
234
235          (ii) MOLECULE TYPE:  PROTEIN
236
237          (xi) SEQUENCE DESCRIPTION:  SEQ ID NO:11:
238
239      Met Gly Ser Ala Gly Ala Arg Pro Ala Leu Ala Ala Ala Leu Leu
240              5 10 15
241      Cys Leu Ala Arg Leu Ala Leu Gly Ser Pro Cys Pro Ala Val Cys
242              20 25 30
243      Gln Cys Pro Ala Ala Ala Pro Gln Cys Ala Pro Gly Val Gly Leu
244              35 40 45
245      Val Pro Asp Gly Cys Gly Cys Cys Lys Val Cys Ala Lys Gln Leu
246              50 55 60
247      Asn Glu Asp Cys Ser Arg Thr Gln Pro Cys Asp His Thr Lys Gly
248              65 70 75
249      Leu Glu Cys Asn Arg Leu Val Asn Asp Ile His Lys Phe Arg Asp
250              80 85 90
251
252      (2) INFORMATION FOR SEQ ID NO:12:
253          (i) SEQUENCE CHARACTERISTICS:
254              (A) LENGTH:  90 AMINO ACIDS
255              (B) TYPE:  AMINO ACID
256              (C) STRANDEDNESS:
257              (D) TOPOLOGY:  LINEAR
258

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**SEQUENCE VERIFICATION REPORT**  
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Original Text